MEMO Number TSR03

DATE: 2022-11-16 **TO:** Dr. LaBerge **FROM:** UHDRTZ

SUBJECT: Progress report for November

1 INTRODUCTION

This memo provides the progress report required by Capstone. This report covers the period November 1 - November 21.

2 COMPLETED WORK

- 2.1 Completed and presented SRR
- 2.2 Completed SOW
- 2.3 Started to work on Start-on-Boot service
 - 2.3.1 Experimented with Linux task schedulers (cron, systemd)
 - 2.3.2 Investigated dependencies of our program that must be running before we start it

3 WORK EXPECTED DURING NEXT PERIOD

- 3.1 Complete Start-on-Boot service
- 3.2 Work on remote SSH capabilities
- 3.3 Look into 4K output
 - 3.3.1 Identify bottlenecks within the system

4 ISSUES FROM PREVIOUS REPORTS

- 4.1 Current Issues
 - 4.1.1 None
- 4.2 Older Issues
 - 4.2.1 None

The problem given includes the following information:

5+2(t-1) for 5 years with 5% interest compounded yearly.

5+2(t-1) is the amount loaned per year with t being the current year

Our solution is as follows.

t = year

p = selling price per unit

r = interest rate per interval

$$p \sum_{t=1}^{5} \frac{100k + 20k(t-1)}{(1+r)^t} = 25M + \sum_{t=1}^{5} \frac{5M + 2M(t-1)}{(1+r)^t}$$
$$p * 5.977 * 10^5 = 6.312 * 10^7$$
$$p = 105.61$$

The selling price would have to be \$105.61